

REMARKS

Claims 1-2, 4-10, and 13-14 were pending. Claims 2-12 and 14 are canceled; and claims 1 and 13 are currently amended. No new matter is added. Applicants respectfully request entry of the amendments, and reconsideration of the rejections.

The Office Action states that the present application is entitled to priority only to the instant filing date of November 30, 2001. Without conceding to the correctness of the Examiner's position, the claims of the present application have been amended. Support for the presently claimed invention may be found in the priority documents as follows:

USSN 08/752,345, filed on November 19, 1996; at page 3, lines 18-26, states that inhibitors of ILK activity are part of the invention, including "drugs which specifically inhibit ILK activity". At page 6, lines 13-17, it is stated that products that inhibit ILK activity have a therapeutic effect in the treatment of chronic inflammatory disease.

A further discussion of screening methods and pharmaceutical formulations in U.S. Patent no. 6,013,782, filed on October 21, 1997, states at column 15, lines 34-35, that "topical treatments are of particular interest".

In view of the above amendments and remarks, Applicants respectfully submit that the presently claimed invention is entitled to the priority date of at least November 19, 1996. In the event that such a priority date is not accorded, Applicants respectfully submit that the present application is entitled to a priority date of at least October 21, 1997.

The present claims have been rejected under 35 U.S.C. 112, first paragraph. Applicants respectfully submit that one of skill in the art could readily have practiced the present invention as claimed.

The invention is based on the finding that the integrin linked kinase (ILK) is a key to certain cellular processes, in view of the link between the extracellular matrix (integrin) and intracellular signaling. It was clearly recognized by Applicants that this protein is involved in certain disease conditions, including chronic inflammation. It was further clearly recognized by Applicants that the activity of ILK could be inhibited and have a relevant biological effect (see Example 5 of USSN 08/752,345).

The identification of small organic molecule inhibitors is straightforward for one of skill in the art when provided with a complete polypeptide sequence, coding sequences and methods of expressing the polypeptide, and useful biological assays, such as the kinase activity of ILK; and the various

biological assays provided in the priority documents. The level of experimentation to identify specific inhibitors is routine, and readily performed by one of ordinary skill in the art.

Practitioners in the chemical and molecular biology arts frequently engage in extensive modification of reaction conditions and complex and lengthy experimentation where many factors must be varied to succeed in performing an experiment or in producing a desired result. The Federal Circuit has found that such extensive experimentation is not undue in the molecular biology arts. For example, the court concluded that extensive screening experiments, while being voluminous, were not undue in view of the art, which routinely performs such long experiments.¹

With respect to the small organic molecules described by Anderson or Zhang, these documents demonstrate that one of skill in the art can readily identify a number of useful molecules for inhibition of ILK, using methods as set forth in the present application.

With respect to the breadth of the claims, the breadth is commensurate with the scope of the invention in light of what was previously known. It is believed that the applicant is entitled to this scope for this reason. Withdrawal of the rejection is requested.

The present claims have been rejected under 35 U.S.C. 102 as anticipated by Anderson *et al.*, or Natarajan *et al.* Applicants respectfully submit that the present claims are entitled to a priority date earlier than either of these references, as described above, and therefore the cited art is not available under 35 U.S.C. 102.

Applicants further submit that the present claims are directed to a specific inhibitor of integrin linked kinase. The disclosure of Natarajan *et al.* relates to inhibitors of PI3-kinase, which are therefore not specific for integrin-linked kinase. The reference therefore fails to meet all of the limitations of the claims.

In view of the above amendments and remarks, withdrawal of the rejection is requested.

CONCLUSION

Applicants submit that all of the claims are now in condition for allowance, which action is requested. If the Examiner finds that a Telephone Conference would expedite the prosecution of this application, she is invited to telephone the undersigned at the number provided.

¹ *Hybritech v. Monoclonal Antibodies, Inc.* 231 USPQ 81 (Fed. Cir. 1986)

USSN: 09/998,250

The Commissioner is hereby authorized to charge any other fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-0815, order number KINE-001CIP5.

Respectfully submitted,

Date: Sept. 8, 2004

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